

ARE YOU AN ANIMAL SAFETY SLEUTH?
LESSON 3: Grades 4-6
BONE-UP ON RABIES PREVENTION AND WILDLIFE!

Show Me Standards: Academic Goals: 1.4, 1.8, 1.10, 2.3, 3.1, 3.2, 3.7, 4.3, 4.6 & 4.7

Communication Arts: 3 & 6; Mathematics: 3 and possibly 6; Science: 3 & 8; Social Studies: 7; Health & Phys Ed: 1, 3, 5 & 7

Objectives: Students will be able to identify both wild and domestic animals. They will be able to explain how rabies is spread and prevented and will be able to distinguish animals that can carry rabies from those that cannot.

Materials:

- Big bag full of stuffed animals (both wild and domestic, try to include mostly native wild animals)
- “Rabies Q’s & A’s Uncovered” handout
- 2000 Missouri and Illinois Rabies Statistics
- Magazines with animal pictures (National Geographic, Pet Life, Missouri Conservationist, Cat Fancy, etc.) (optional)
- Markers and colored pencils
- Glue
- 11 x 17 paper, card stock or construction paper

Method: Once again play our detective theme music, Mission Impossible, to get the class excited about the day’s activities. Write the following on the chalkboard prior to the start of class: “_____ is a disease that is caused by a virus that attacks the brain and spinal cord and can kill the victim if not prevented.” Tell your detectives this is a definition and while the theme music is playing, ask them to take a minute to think about what the missing word is. Once someone identifies it correctly as rabies, write it in the blank and explain to the students that they will be surprised about the amount of misguided information concerning the rabies virus. Ask your students to guess who can get rabies and how many of these victims were found infected with rabies in Missouri in 2000. You will probably get some exaggerated answers.

Explain that they will discover important information about the rabies virus but first must uncover some background information. Write the words WILD and DOMESTIC on the chalkboard and ask the students to tell you what they mean. Write their correct definitions beneath the corresponding words and give them one example of each type of animal and write it on the board under the correct title. Ask for volunteers to draw a stuffed animal out of the bag and have the class decide if it is wild or domestic and keep them in two separate piles. Add these animals to the lists you just started until all of the animals have been pulled from the bag.

Then write the headings MAMMALS and NON-MAMMALS on the chalkboard and ask the students to tell you what characteristics distinguish a mammal from a non-mammal and write the correct responses on the board. Then ask students to look at the stuffed animals that have been pulled from the bag and distinguish or separate the mammals from the non-mammals and write their names on the board under their perspective headings.

Now explain to students that only mammals can become infected with rabies and that almost all animals infected with rabies are wild. Circle the headings MAMMALS and WILD and ask the students to put on their spyglasses and find the animals that are listed under **both** of these columns and circle them. Now they have a list of animals that are most susceptible to rabies.

Distribute the “Rabies Facts Uncovered handout to each student and read it aloud together. Encourage questions and discussion.

Call to Action: Have the students fold both the right and left hand sides of the 11x17 paper inward like a brochure so that when it opens you have three equally sized columns separated by the folds in the paper. Have them write the following headings across the paper at the top of each column in this order:

Animals most often infected with rabies /Animals rarely infected with rabies /Animals Never Infected with Rabies

All three headings will then have the following categories listed under them:

(Wild mammals)

(Domestic mammals)

(Non-Mammals)

Your students will create collages of animals. Have the students either cut pictures of animals out of magazines and glue them beneath each column creating a collage or simply have them draw various animals under their corresponding columns and label them with the animals' names. Although each student is to create their own collage, they can be allowed to work together in their detective groups to help each other. Hang the collages in a high-traffic area for others to learn about rabies. Following this page is a list of things you can do to prevent the spread of rabies (see Question 4 "Can the rabies virus be prevented?" Enlarge this and hang it in the middle of the display, surrounding it with the detectives' collages. You can title the display: Look what our Detective Work Uncovered about the Rabies Virus!

Extensions: Use the rabies statistics from Illinois and Missouri to create line or bar graphs. Compare the results and ask questions such as:

1. Did Illinois or Missouri have more cases of rabies reported in 2000?
2. Which state had the most domestic animal cases reported in 2000?
3. Rabies was found most frequently in which animal in Missouri?
4. Rabies was found most frequently in which animal in Illinois?

Attention Teacher: See the following activity sheet "No MAYBEs with Rabies"

Web sites: For recommended animal-related web sites visit www.apamo.org and choose "Animal Issues" from the left-side menu, then choose "Links" from the top of the page. Or [click here](#) to launch your browser and link directly to the list.

RABIES Q'S & A'S UNCOVERED

Q: Who can become infected with rabies?

A: Only mammals can become infected with the rabies virus. A **virus** is a very tiny germ that can't be seen with the human eye. **Mammals** are warm-blooded animals that give birth to live young, have hair or fur on their bodies and nurse from their mothers (foxes, skunks, squirrels, dogs, cats humans, etc.). Make it clear that if only mammals can become infected with the rabies virus, then that means the animals in the non-mammal group cannot become infected with rabies (snakes, turtles, birds, fish, etc.).

Q: Which animals are at a higher risk of getting rabies?

A: Humans and **domestic** animals account for a very small percentage of those who become infected with the disease. 93 out of 100 reported cases of rabies are found in **wild** animals.

Wild animals, such as raccoons, squirrels, wolves, and foxes live in their natural habitat and can survive without the help of humans. Actually, they are better off and happier left alone and can raise their own young, find their own food and have ways of protecting themselves.

Domestic animals, such as cats, dogs, hamsters and other common pets are those that humans have taken into their homes as pets. These animals can no longer take care of themselves and depend on humans to survive.

Q: How is the rabies virus spread?

A: Rabies is spread in an infected animal's saliva. **Saliva** is the natural liquid that forms in your mouth like spit. If an animal that is infected with rabies bites another animal or human then the disease is spread to that animal. The animal can carry the virus for 3-12 weeks without showing any signs of being sick. The infected animal will eventually begin showing signs of sickness like:

1. Problems swallowing
2. Increased Drooling
3. Aggression
4. General sickness
5. Change in behavior (a usually friendly pet may try to bite and wild animals may move around slowly and allow humans and other animals to get near them)

You cannot get rabies from contact with animal blood or by petting an animal. If a cat with rabies licks her paw and then scratches you then you can become infected with rabies. **REMEMBER:** It is spread only through saliva.

Q: Can the rabies virus be prevented?

A: Absolutely! You can stop the spread of rabies by doing all of these things:

1. Take your pets to the veterinarian once a year to get a rabies vaccination or shot.
2. Don't leave pets outdoors where they may come in contact with infected wild animals.
3. Keep your pets on a leash so you can make sure they don't have close contact with wild animals.
4. Keep lids on your trashcans so wild animals aren't attracted to your home.
5. **DO NOT** approach wild animals or try to touch them! Enjoy wild animals from afar. Tell an adult and contact your local animal control officer if you find a stray or wild animal that appears sick or injured. Try to remember the address so the officer can find the animal.
6. If you are bitten by any animal, quickly wash the bite area with soap and warm water for at least five minutes, tell an adult immediately and call your doctor! Call an animal control officer and give him/her a description of the animal and its location so he/she can find it.
7. If your pet is bitten by an animal, tell an adult and call your veterinarian immediately even if your pet is up to date on all his shots.

Rabies Statistics
(provided by the Center for Disease Control)

Missouri Rabies Cases (2000)

All Animal Cases	50
Domestic Animals	1
Wild Animals	49

Domestic animals diagnosed with rabies (Missouri 2000)

Dogs	0
Cats	2
Cattle	1
Horses/Mules	1
Sheep/goats	0
Swine	0
Other domestic	0

Wild animals diagnosed with rabies (Missouri 2000)

Skunks	5
Foxes	0
Bats	44
Raccoons	0
Rodents/rabbits	0
Other wild animals	0

Human Rabies (Missouri 2000) = 0

Illinois Rabies Cases (2000)

All animal cases	22
Domestic animals	0
Wild animals	22

Domestic animals diagnosed with rabies (Illinois 2000)

Dogs	0
Cats	0
Cattle	0
Horses/mules	0
Sheep/goats	0
Swine	0
Other domestic	0

Wild animals diagnosed with rabies (Illinois 2000)

Skunks	0
Foxes	0
Bats	22
Raccoons	0
Rodents/rabbits	0
Other wild animals	0

Human Rabies (Illinois 2000) = 0

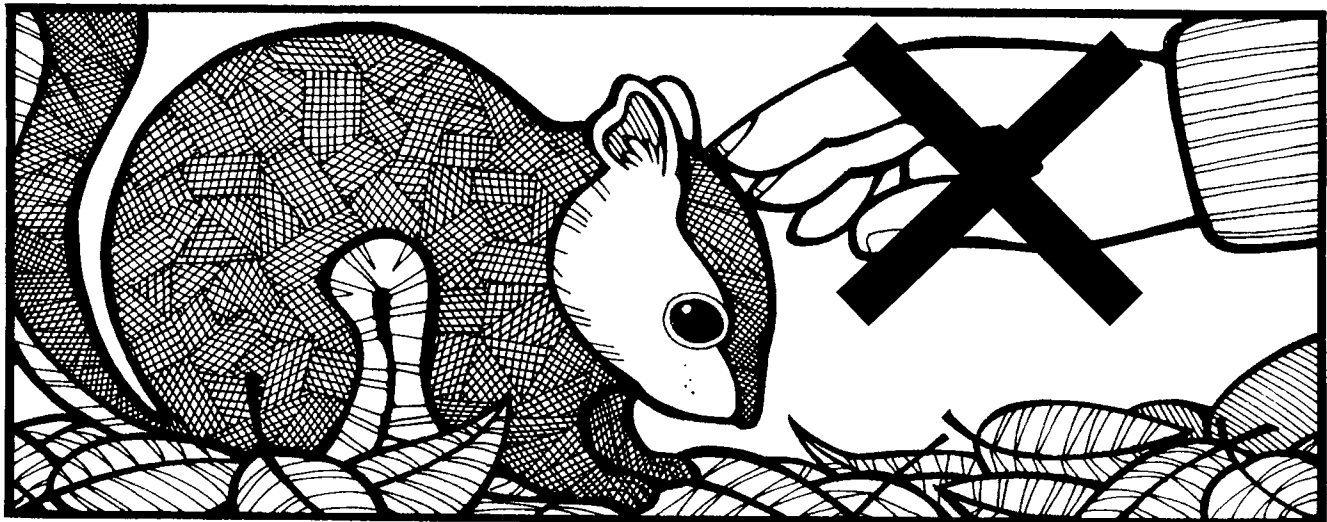
KIND Name _____

No MAYBEs with Rabies

Rabies is a dangerous disease. But we can keep ourselves and our pets safe. To find out how, count the number of words in each question below. If the question has an even number of words, write yes in

the blank beside it. If the question has an odd number of words, write *no* in the blank. Answer only *yes* or *no*. No *maybes* with rabies!

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- Should you tell your parents right away if you are bitten by an animal? _____
 - Is it safe to pet a raccoon that acts very friendly? _____
 - Is it OK to keep a baby raccoon for a pet? _____
 - Should you get your dog or cat a rabies shot? _____
 - Should you keep your dog in a fenced yard or on a leash, so that he or she cannot meet wild animals? _____
 - Should you touch a wild animal that is sick or hurt? _____
 - Should you feed wild animals? _____
 - Is it safe to help an injured bat that you find lying on the ground? _____
 - Should you get a rabies shot for your cat who stays indoors? _____
 - Should you keep garbage cans closed up tightly so wild animals don't come around? _____



Draw a picture to illustrate (tell about) one of the *yes* questions above. Use the back of this paper.